

WHAT IS CLAIMED IS:

1. A method of fabricating a liquid crystal display having a thin film transistor with a gate electrode, a gate insulating film, an active layer, an ohmic contact layer, a source electrode, and a drain electrode on a transparent substrate, said method comprising:

forming an organic passivation layer over the transparent substrate and over the thin film transistor;

defining a contact hole through the organic passivation layer to expose the drain electrode;

irradiating the organic passivation layer with ultraviolet rays to form a hydrophilic buffer layer; and

forming a pixel electrode over the hydrophilic buffer layer and in the contact hole such that the pixel electrode contacts the drain electrode via the contact hole and such that the pixel electrode adheres to the hydrophilic buffer layer.

2. The method according to claim 1, wherein the step of forming an organic passivation layer produces an organic passivation layer having a low dielectric constant.

3. The method according to claim 1, wherein the step of irradiating the organic passivation layer uses ultraviolet rays have wavelengths between about 100 to 200nm.

4. The method according to claim 1, wherein the step of irradiating the organic passivation layer occurs at normal processing pressure.
5. The method according to claim 1, wherein the step of irradiating the organic passivation layer occurs at atmospheric pressure.
6. The method according to claim 1, wherein the step of irradiating the organic passivation layer produces a buffer layer comprised of an oxide.
7. The method according to claim 1, wherein the step of irradiating the organic passivation layer produces a buffer layer having a thickness of 10Å to 50Å.
8. The method according to claim 1, wherein the step of forming a pixel electrode produces a transparent pixel electrode.
9. A liquid crystal display, comprising:
  - a substrate;
  - a thin film transistor on said substrate, said thin film transistor including a gate electrode, a gate insulating film, an active layer, a source electrode, and a drain electrode;
  - an organic passivation layer over the thin film transistor;
  - a buffer layer over said passivation layer; and
  - an electrode over said buffer layer.

10. A liquid crystal display according to claim 9, wherein said buffer layer has a hydrophilic property.
11. A liquid crystal display according to claim 10, further including a contact hole through said passivation layer and that exposes said drain electrode, wherein said electrode electrically contacts said drain electrode via the contact hole.
12. A liquid crystal display according to claim 11, wherein said electrode is a pixel electrode.
13. A liquid crystal display according to claim 12, wherein said pixel electrode is transparent.
14. A liquid crystal display according to claim 13, wherein said pixel electrode is comprised of indium.
15. A liquid crystal display according to claim 9, wherein said substrate is transparent.
16. A liquid crystal display according to claim 9, wherein said organic passivation layer is comprised of  $\beta$ -staggered-divinyl-siloxane-benzocyclobutene.
17. A liquid crystal display according to claim 9, wherein said organic passivation layer is comprised of an acrylic organic compound.
18. A liquid crystal display according to claim 9, wherein said organic passivation layer is comprised of perfluorocyclobutane.
19. A liquid crystal display according to claim 9, wherein said buffer layer is an oxide.

Figure 1 consists of 12 subplots, each showing the maximum value of a function as a function of a specific parameter. The parameters are labeled (a) through (l). The y-axis for all plots is 'Maximum value'. The x-axis for all plots is the parameter name, ranging from 0 to 1.0. The plots show that as the parameter increases, the maximum value generally decreases. For example, in (a) alpha, the maximum value starts at approximately 0.8 and decreases to about 0.4. In (g) eta, there is a very sharp initial drop from about 0.8 to 0.2, followed by a gradual decrease. In (l) omega, the maximum value starts at about 0.6 and decreases to about 0.2.